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WATER SUPPLY OUTLOOK

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

for
IDAHO

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE. and

IDAHO STATE RECLAMATION ENGINEER

Data included in this report were obtained by the agency named above in cooperation with the Comptroller of Water Rights of British Columbia, and Federal, State and private organizations listed on the last page of this report.

MAY 1, 1964

UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

To Receptents of Water Supply Outlook Reports:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from your to year and accordingly, so does the innoff of the streams. The best seasonal management of variable western water supplies results from advance estimates of the streamflow.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, up to 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Show surveys are made mouthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1400 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

Streamflow forecasts are obtained by a comparison of total or maximum show accumulation, as measured by show water equivalent, to the subsequent spring and summer or showmelt season runoff over a period of years. The show water equivalent measured to selected show courses provides most of the index to the streamflow forecast for the following season. More accurate forecasts are usually obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast procedure. Early season forecasts assume average visibility conditions through the showmelt season.

Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions. Soil Conservation Service Reports may be secured from Water Supply Forecasting Unit, Soil Conservation Service, P.O. Box 2807, Portland, Oregon 97208.

PUBLISHED BY SOIL CONSERVATION SERVICE

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| CALIFORNIA | MONDAY (FIBMAY)_ | CALIF. DEPT. C | F WATER RESOURCES, P.O. BOX 388, |

SACRAMINTO, CALIF.

WATER SUPPLY OUTLOOK

rederal - State - Private Cooperative Snow Surveys

for

IDAHO

Report prepared by

MORLAN W. NELSON

Snow Survey Supervisor

and

J. ALDEN WILSON Asst. Snow Survey Supervisor

SOIL CONSERVATION SERVICE SNOW SURVEY SECTION BOX 1247. BOISE. IDAHO

Issued by

LEE T. MORGAN

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
BOISE, IDAHO

CARL E. TAPPAN
STATE RECLAMATION ENGINEER
DEPARTMENT OF RECLAMATION
BOISE, IDAHO



WATER SUPPLY OUTLOOK for IDAHO









GENERAL SUMMARY FOR MAY 1, 1964

The water supply outlook for Idaho did not change significantly during the month of April. Water supplies are forecast to be close to normal throughout the entire state. Cool temperatures delayed the snow melt on north slopes and at high elevations. Valley and south slope snow pack melted at a steady rate. The retarded snow melt will increase the speed of runoff and raise the flow of the rivers much higher than would ordinarily occur under normal conditions.

Snowfall in the high mountainous areas throughout Idaho was above normal during April. Goat Lake snow course on the Clearwater River increased 7.3 inches of water during this month. In an average year, the snow-water content would have decreased slightly. Another new course on the Clearwater River - Lost Lake - has 161 inches of snow with 74.4 inches of water. Very short back records on these courses make interpretations difficult.

In general, the cool temperatures retarded snow melt and resulted in below normal runoff during April. This will cause nearly the same volumes of water to flow during the May through September period as was expected for April through September. The Spokane River is a good example. The April through September volume forecast on the Spokane River was 105% of its normal on April first. When the actual flow for April was subtracted from this forecast, the May through September period increased to 125% of its average. A similar situation exists on the Clearwater River and, to a lesser degree, on all rivers in Idaho.

Farm operations have been delayed by the late snow melt and cool weather. The heavy valley and foothill snow cover that occurred this season has been a major factor in retarding general farm and ranch operations. However, this snow cover has now melted and soil moisture conditions are excellent for range forage and farming.

Soil moisture stations throughout the state indicate excellent soil moisture as a result of the melting snow. In many areas, the soil which has been relatively warm beneath the snow all winter, has absorbed more precipitation and melting snow than was expected. It was fortunate that the soil was unfrozen beneath the heavy snow in the foothills because it prevented fast destructive runoff.

Reservoir-stored water throughout the state varies from good to excellent and adjustments are being made to make the most efficient use of the 1964 season's flow.

RESERVOIR STORAGE USABLE CONTENTS (1,000 Acre Feet) MAY 1, 1964 150 50 SCALE IN MILES Contents 101.1 NOXON RESERVOIR Capacity 334.6 2003.0 HUNGRY HORSE 437.6 3428.0 PEND OREILLE 1561.0 **42.2** MACKAY 770.7 50 FLATHEAD LAKE 226.6 1791.0 44.2 COEUR D'ALENE 238.5 133.4 **Q** ISLAND PARK 102.6 127.0 3 DEADWOOD 161.9 9.4 GRASSY LAKE 345.9 15.2 CASCADE 653.2 635.4 JACKSON LAKE 469.9 0 847.0 BROWNLEE 980.2 5 821.5 PALISADES 624.7 1200.0 OWYHEE 715.0 0. 1697.3 AMERICAN FALLS 161.1 1700.0 LAKE LOWELL 169.0 802.9 BEAR LAKE 182.5 1421.0 LUCKY PEAK N 278.2 28.1 278.7 LITTLE WOOD ARROWROCK 33.3 286.6 49.3 20.3 192.2 327.8 OAKLEY MAGIC

74.4

191.5

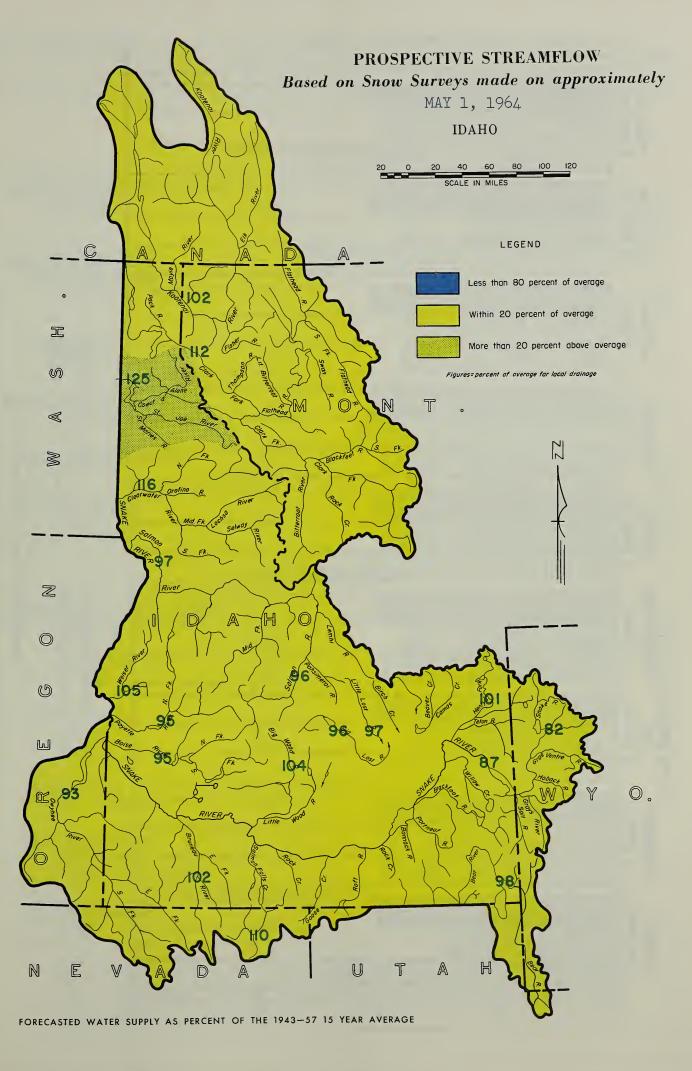
ANDERSON RANCH

423.2

SALMON FALLS

182.6

| RESERVOIR | USABLE CAPACITY | THIS YEAR | EASURED (First of Mo | nth) |
|-----------------------------|-----------------|----------------|----------------------|-----------------|
| | | INIS TEAR | LAST YEAR | 1949-57 AVERAGE |
| UPPER COLUMBIA BASIN | | | | |
| | | | | |
| Clark Fork - Pend Oreille | 2/00 0 | 0002 0 | 0505 0 | 00/0 04 |
| Hungry Horse | 3428.0 | 2003.0 | 2535.0 | 2048.0* |
| Flathead Pend Oreille | 1561.0 | 770.7 437.6 | 966.5 636.6 | 936.0 783.7 |
| Noxon | 334.6 | 101.1 | 117.8 | /03./ |
| Spokane | 334.0 | 101.1 | 117.0 | |
| Coeur d'Alene | 238.5 | 226.6 | 168.4 | 350.2 |
| | | | | 00110 |
| SNAKE BASIN | | | | |
| | | | | |
| Snake | | | | |
| Jackson Lake | 847.0 | 635.4 | 631.3 | 503.3 |
| American Falls | 1700.0 | 1697.3 | 1732.8 | 1614.9 |
| Palisades | 1200.0 | 821.5 | 1191.0 | 107 / |
| Island Park | 127.0 | 133.4 9.4 | 133.4 | 127.4 13.4 |
| Grassy Lake Brownlee | 980.2 | 469.9 | 977.0 | 13.4 |
| Goose-Trapper Creeks | 900.2 | 407.7 | 977.0 | |
| Oakley | 74.4 | 20.3 | 22.1 | 28.5 |
| Salmon Falls Creek | | 20.3 | | 20.5 |
| Salmon Falls | 182.6 | 49.3 | 45.0 | 56.6 |
| Big Lost | | | | |
| Mackay | 44.2 | 42.2 | 37.8 | 36.0 |
| Big Wood | | | | |
| Magic | 191.5 | 192.2 | 191.5 | 183.3 |
| Little Wood | | | | |
| Little Wood | 33.3 | 28.1 | 30.4 | |
| Boise | / / / / / | 207.0 | 255 / | 015 64 |
| Anderson Ranch | 423.2 | 327.8 | 355.4 | 215.6* |
| Arrowrock Lucky Peak | 286.6 278.2 | 278.7 182.5 | 284.1 256.3 | 222.3 |
| Lake Lowell (Deer Flat) | 169.0 | 161.1 | 162.5 | 160.2 |
| Owyhee | 107.0 | 101.1 | 102.5 | 100.2 |
| Owyhee | 715.0 | 624.7 | 378.1 | 617.5 |
| Payette | | | | |
| Cascade | 653.2 | 345.9 | 599.7 | |
| Deadwood | 161.9 | 102.6 | 118.8 | 99.4 |
| | | | | |
| GREAT BASIN | | | | |
| 2 | | | | |
| Bear Lake | 1421.0 | 802.9 | 804.2 | 921.5 |
| Bear Lake | 1421.0 | 802.9 | 804.2 | 921.5 |
| | | | | |
| | | | | 1 |
| | | | | |
| * Estimated 1943-57 Average | | | | |
| | | | | |
| | | | | |
| | | | | |
| * Estimated 1943-57 Average | | | | |



PERCENT of 1943-57 AVERAGE 200 50 00 150 7992 Kootenai R. at Leonia 7376 8200 at Post Falls 2128 Spokane R. 1078 2650 3718 near Heise Snake R. 3124 Lost Yeors Flow 15 Yr. Average Flow 1943-57 3250 near Mackay 161 Big Lost R. 169 150 Big Wood R. at Hailey 249 238 260 This Years Forecast 123 Flow in Thousands of Acre Feet above Diversion 1297 Boise R. 1124 1240 Horseshoe Bend 1624 Payette R. 1378 6358 at Whitebird Salmon R. 6205 6150 Clearwater R. 7157 at Spalding 5048 8300 0 50 200 150 00

PERCENT of 43-57 AVERAGE

STREAMFLOW FORECASTS (May through September period)

Based on Snow Surveys made on approximately

MAY .1, 1964

WATER SUPPLY OUTLOOK (**pressed as "Paor", "Fair") a and STREAMFLOW FORECASTS (1,000 Ac. Ft.) c

| STREAM and/or FORECAST POINT | OUTLOOK | FORECAST THIS YEAR | FORECAST PERIOD | 1943-57 AVERAGE | THIS YEAR AS PERCENT OF AVERAGE |
|------------------------------|---------|-----------------------|-----------------|--------------------|---------------------------------|
|------------------------------|---------|-----------------------|-----------------|--------------------|---------------------------------|

1

| | UPPER COLUMB | IA BASIN | | | |
|----------------------------------|----------------|-------------|----------|--------------|-----|
| KOOTENAI RIVER | | | | 5 | |
| Leonia | (at) | 8200 | May-Sep | 7994 | 102 |
| and the to to the this | (44) | 6920 | May-Jul | 6903 | 102 |
| | | 5470 | May-Jun | 5341 | 102 |
| PEND OREILLE RIVER | | 2.,, | | | |
| Clark Fork River | | | | | |
| Whitehorse Rapids | (at) | 13600 | May-Sep | 12144 | 112 |
| | | 12300 | May-Jul | 10975 | 112 |
| | | 10100 | May-Jun | 9027 | 112 |
| Priest River | | | | , | |
| Priest River 1/ | (nr) | 840 | May-Jul | 729 | 115 |
| " Pag | (, | | , | , = , | |
| SPOKANE RIVER | | | | | |
| Post Falls 2/ | (at) | 2650 | May-Sep | 2127 | 125 |
| as which as the same of the same | (40) | 200 | rady ocp | | 123 |
| Coeur d'Alene River | | | | | |
| Cataldo | (nr) | 1030 | May-Sep | 842 | 122 |
| | (000) | 960 | May-Jul | 783 | 123 |
| St. Joe River | | ,,,, | 110) 001 | ,05 | |
| Calder | (at) | 1260 | May-Sep | 1051 | 120 |
| | (44) | 1210 | May-Jul | 983 | 123 |
| | | <i>2.6.</i> | nay our | 703 | |
| | SNAKE RIVE | R BASTN | | | |
| | 24/27/27 1/2/4 | | | | |
| SNAKE RIVER - MAIN STEM | | | | | |
| Moran 3/ | (at) | 722 | May-Sep | 881 | 82 |
| Heise 4/ | (nr) | 3250 | May-Sep | 3718 | 87 |
| Blackfoot 5/ | (nr) | 3270 | May-Jul | 3735 | 88 |
| Weiser | (at) | 5200 | May-Sep | 5835 | 89 |
| WC20C2 | (40) | 2200 | aray sop | 3033 | |
| Henry's Fork | | | | | |
| Ashton 6/ | (nr) | 530 | May-Sep | 526 | 101 |
| Rexburg 7/ | (nr) | 1150 | May-Sep | 1164 | 99 |
| Meanare I | (117) | 1130 | ray sep | 1104 | |
| Teton River | | | | | |
| St. Anthony | (nr) | 360 | May-Sep | 376 | 96 |
| www.waswasy | (324) | 300 |) -op | 3 , 3 | |
| Blackfoot River | | | | | |
| Blackfoot | | | | | |
| Reservoir Inflow | | 110 | May-Sep | | |
| ALGOVA TVAA MARAAVT | | |) +-F | | |
| Portneuf River | | | | | |
| Topaz | (at) | 65 | May-Sep | 40 en | |
| Tobers | (00) | | | | |

⁽a) Includes seasonal runoff, stored water, diversions and other sources. (c) Assuming normal meteorological conditions. 1/Observed flow corrected for storage in Priest Lake. 2/Observed flow corrected for storage in Coeur d'Alene Lake and diversions by Spokane Valley Farms Company and Rathdrum Prairie canals. 3/Corrected for storage in Jackson Lake. 4/Corrected for storage in Jackson Lake and Palisades. 5/Corrected for storage in Jackson Lake, Palisades, Island Park, Henry's Lake, Grassy Lake and diversions between Heise and Blackfoot. 6/Corrected for storage in Henry's Lake and Island Park Reservoir. 7/Corrected for storage in Henry's Lake, Island Park, Grassy Lake and diversions between Ashton and Rexburg.

WATER SUPPLY OUTLOOK ("Average" or "Excellent") and STREAMFLOW FORECASTS (1,000 Ac. Ft.)

| WATER SUPPLY OUTLOOK (expressed as room, rain) | |) and | STREAMFLOW FORECASTS (1,000 Ac. Ft.) | | | | |
|--|-------|---------|--------------------------------------|--------------------|--------------------|-------------------------------------|--|
| STREAM and/or FORECAST PO | TNIC | OUTLOOK | FORECAST THIS YEAR | FORECAST PERIOD | 1943-57 AVERAGE | THIS YEAR AS PERCEN OF AVERAG | |
| | | | | | | | |
| Salmon Falls Creek | | | | | | | |
| San Jacinto | (nr) | | | May-Sep | 55 | 110 | |
| | | | 58 | May-Jul | 53 | 110 | |
| Bruneau River | | | 170 | | | | |
| Hot Springs | (nr) | | 170 | May-Sep | 167 | 102 | |
| Idetla Last Pivor | | | | | | | |
| Little Lost River Howe | (nr) | | 30 | May-Sep | 31 | 97 | |
| nowe | (111) | | 30 | nay bep | 31 | | |
| Big Lost River | | | | | | | |
| Howell Ranch | (at) | | 125 | May-Jun | 125 | 100 | |
| Mackay 1/ | (nr) | | | May-Sep | 156 | 96 | |
| - | | | | • | | | |
| Big Wood River | | | | | | | |
| Hailey <u>2</u> / | (at) | | 315 | May-Sep | 302 | 104 | |
| Magic Reservoir | | | | | | | |
| Inflow 3/ | | | 235 | May-Jul | | | |
| Little Wood River | | | | | | | |
| High Five Creek | (ab) | | 64 | May-Sep | 62 | 103 | |
| | | | | | | | |
| Boise River | () | | 600 | W C | 622 | 0.5 | |
| Twin Springs | (nr) | | | May-Sep | 633 | 95 | |
| Pot co // | () | | | May-Jul May-Sep | 579 1309 | 96 95 | |
| Boise 4/ | (nr) | | 1240 | мау-зер | 1309 | 93 | |
| South Fork | | | | | | | |
| Anderson Dam 5/ | (at) | | 475 | May-Sep | 511 | 93 | |
| _ | | | | | | | |
| Owyhee River | | • | | | | | |
| Gold Cr., Nev. 6/ | (nr) | | 9 | May-Jul | 11 | 82 | |
| Owyhee, Nev. 6/ | (nr) | | 43 | May-Jul | 53 | 81 | |
| Lake Owyhee | | | | May-Sep | 214 | 93 | |
| net inflow 7/ | | | 185 | May-Jul | 196 | 94 | |
| D D. | | | | | | | |
| Payette River | () | | 15/0 | | 1606 | 0.5 | |
| Horseshoe Bend 8/ | (nr) | | 1540 | May-Sep | 1624 | 95 | |
| North_Fork | | | | | | | |
| Cascade 9/ | (at) | | 480 | May-Sep | 499 | 96 | |
| Banks 9/ | (nr) | | | May-Sep | 631 | 97 | |
| | | | 580 | May-Jul | 597 | 97 | |
| South Fork | | | | | | | |
| Banks <u>10</u> / | (nr) | | 830 | May-Jul | 869 | 96 | |
| | | | | | | | |

⁽a) Includes seasonal runoff, stored water, diversions and other sources. (c) Assuming normal meteorological conditions. 1/Observed flow corrected for storage in Mackay Reservoir and diversion in Sharp Ditch. 2/Combined discharge of Big Wood River and Big Wood Slough corrected for diversions. 3/Combined flow Big Wood River nr. Bellevue and Camas Creek nr. Blaine. 4/Corrected for storage in Arrowrock, Anderson Ranch and Lucky Peak. 5/Corrected for storage in Anderson Ranch Reservoir. 6/Corrected for storage in Wild Horse Reservoir. 7/From U.S.B.R. records of inflow. 8/Corrected for storage in Cascade and Deadwood Reservoirs. 9/Corrected for storage in Cascade Reservoir. 10/Corrected for storage in Deadwood Reservoir.

FORECAST

THIS YEAR

1943-57

WATER SUPPLY OUTLOOK ("Average" or "Excellent") and STREAMFLOW FORECASTS (1,000 Ac. Ft.)

| STREAM and/or FORECAST PO | DINT | OUTLOOK | FORECAST THIS YEAR | FORECAST PERIOD | 1943-57 AVERAGE | AS PERCENT OF AVERAGE |
|--|--------------|---------|-----------------------|-------------------------------|----------------------|--------------------------|
| | | | | | | |
| Weiser River Weiser ab. Crane Creek 1/ | | | 300 | May-Sep | 286 | 105 |
| Salmon River Whitebird Challis | (at) (nr) | | 6150 840 725 | May-Sep May-Sep May-Jul | 6358 873 754 | 97 96 96 |
| Clearwater River Spalding Kamiah | (at) | | 8300 4900 4700 | May-Sep May-Sep May-Jul | 7157 4226 4011 | 116 116 117 |
| <u>North Fork</u> Ahsahka | (nr) | | 2930 2700 | May-Sep May-Jul | 2505 2312 | 117 117 |
| | GREA | T BASIN | | | | |
| BEAR RIVER Harer | (at) | | 230 | May-Sep | 235 | 98 |
| Montpelier Creek Montpelier | (nr) | | 11.5 | May-Sep | 10.5 | 110 |
| Cub River Preston | (nr) | | 50 | May-Sep | 47 | 106 |

⁽a) Includes seasonal runoff, stored water, diversions and other sources. (c) Assuming normal meteorological conditions. 1/Observed flow of Weiser River nr. Weiser minus observed flow of Crane Creek at mouth.

VALLEY PRECIPITATION 1/

Division Averages and Departures
In Inches

| DRAINAGE | Fall SepNov1963 | | Wint Dec.'63- | | Spring April 1964 | |
|--------------------------|--------------------|--------|------------------|--------|----------------------|-----------------|
| DIVISIONS | Obs. | Dep.2/ | Obs. | Dep.2/ | Obs. | Dep. <u>2</u> / |
| Kootenai, Canada & U. S. | 7.28 | +1.19 | 8.92 | -1.68 | 1.41 | -0.04 |
| Flathead | 4.34 | -0.87 | 6.50 | -1.15 | 1.36 | -0.14 |
| Clark Fork | 3.40 | +0.50 | 3.14 | -0.34 | 122 | +0.35 |
| Pend Oreille-Spokane | 8.05 | -0.78 | 12.71 | -1.67 | 2.20 | +0.11 |
| Upper Snake | 6.51 | +1.68 | 7.72 | -1.01 | 1.87 | +0.51 |
| Snake River Plain | 3.00 | +0.90 | 2.73 | -0.89 | 0.95 | +0.13 |
| Salmon-Payette-Boise | 5.39 | +0.68 | 7.86 | -1.58 | 1.54 | +0.09 |
| Clearwater | 5.46 | -1.24 | 9.85 | -1.03 | 3.33 | +0.97 |
| Southeastern Oregon | 3.32 | +0.95 | 3.25 | -1.24 | 1.10 | +0.25 |

^{1/} Preliminary analysis by U. S. Weather Bureau from data furnished by Meterological Service of Canada and U. S. Weather Bureau.

^{2/} Departure from 15-year (1943-57) drainage division average.

| SNOW | | | CUR | RENT INFORM | ATION | PAST R | ECORD |
|--------------------------------|---------------|--|-----------------|-------------|------------------|------------|--------------|
| DRAINAGE BASIN and SNOW COURSE | | | | SNOW DEPTH | WATER CONTENT | WATER CONT | ENT (Inches) |
| NAME | NO. ELEVATION | | SURVEY (Inches) | | (Inches) | LAST YEAR | AVERAGE b |

| | UPPE | R COLUM | MBIA BAS | SIN | | | |
|----------------------------------|---------------|--------------|--------------|----------|-------------|------------|----------------------|
| KOOTENAI RIVER | | | | | | | |
| Smith Creek | 16A1 | 4800 | 4/30 | 115 | 56.4 | 30.7 | 46.3* |
| PRIEST RIVER | | | | | | | |
| Benton Meadow | 16A2 16A3 | 2344 4900 | 4/29 4/28 | 0 48 | 0.0 21.6 | 0.0 7.8 | 0.0 * 17.8 |
| Benton Spring Schweitzer Bowl | 16A6 | 4500 | 4/29 | 64 | 30.6 | 7.0 | |
| Schweitzer Ridge | 16A5 | 6100 | 4/29 | 128 | 56.2 | | |
| SPOKANE RIVER | | | | | | | |
| Copper Ridge | 1682 | 4800 | 4/28 | 91 | 44.0 | 9.0 | 27.8 |
| Fourth of July Smt. Granite Peak | 16B3 15B13 | 3100 6000 | 4/28 4/28 | 8 122 | 3.2 53.3 | 0.0 | |
| Lookout | 1582 | 5250 | 4/28 | 104 | 44.3 | 25.2 | 33.6* |
| Lower Sands Creek | 16B1 | 3400 | 4/28 | 62 | 28.8 | 2.2 | 12.6* |
| Medicine Ridge | 15B4 | 6150 | 4/28 | 118 | 52.7 | | |
| Outlaw Creek | 15B12 | 3750 | 4/28 | 39 | 16.5 | T | |
| | | | | | | | |
| | | SNAKE | BASIN | | | | |
| HENRY'S FORK - TETON | RIVER | | | | | | |
| Big Springs | 11E9 | 6500 | 4/30 | 42 | 18.7 | 10.5 | |
| Darby Canyon (A) | 10F21 | 8250 | 4/30 | 63 | 23.6 | 20.3 | |
| Grassy Lake | 10E15 | 7230 | 4/30 | 74 | 32.8 | 28.7 | 32.4 |
| Island Park | 11E10 | 6315 | 4/30 | 27 | 10.1 | 7.7 | |
| Pine Creek Pass | 11F2 | 6750 | 4/30 | 35 | 16.0 | 12.8 | |
| State Line | 11F1 | 6400 | 4/30 | 34 | 14.5 | 9.2 | |
| Teton Pass | 10F13 | 8500 | 4/30 | 88 | 33.0 | 27.2 | 39.9* |
| Valley View | 11E8 | 6500 | 4/30 | 38 | 16.1 | 11.5 | |
| RAFT RIVER, GOOSE CRE | EK, SALM | ION FALI | S CREEK | , BRUN | EAU RIVER | | |
| Badger Gulch | 14G3 | 6660 | 5/1 | 32 | 12.6 | 2.2 | |
| Bear Creek (A) | 15H1 | 7800 | 4/29 | | 17.5 | 18.6 | 21.2* |
| Bostetter R. S. (A) | 14G1 | 7500 | 4/29 | 37 | 17.4 | 3.5 | |
| Boy Scout Camp (A) | 13G2 | 7600 | 4/29 | 32 | 12.7 | 10.7 | |
| Cedar Creek (A) | 14G5 | 7000 | 4/29 | 13 | 6.4 | 2.5 | 2.9* |
| Clear Cr. Meadows (A) | | 9050 | 4/29 | 69 | 27.5 | 23.0 | |
| Deadline | 14G4 | 6900 | 4/28 | 57 | 28.2 | 12.4 | 20.8* |
| Goat Creek (A) | 15H13 | 0088 | 4/29 | 43 | 20.2 | 18.9 | 19.9* |
| Howell Canyon | 13G1 | 8000 | 5/2 | 65 | 27.0 | 20.6 | 400 400 |

⁽b) 1943-57, 15 year period. # Not located directly on this drainage. * Estimated 1943-57, 15 year Average.

(A) Aerial observation: Water content estimated.

| SNOW | | | CUR | RENT INFORMA | ATION | PAST RECORD | |
|-------------------------|----------|-----------|---------|--------------|------------------|-------------|-------------|
| DRAINAGE BASIN and SNOW | V COURSE | | DATE OF | SNOW DEPTH | WATER CONTENT | WATER CONTE | NT (Inches) |
| NAME | NO. | ELEVATION | SURVEY | (Inches) | (Inches) | LAST YEAR | AVERAGE b |
| | | | | | | | |
| Hummingbird Springs (A |) 15H15 | 8945 | 4/29 | 81 | 32.2 | 22.6 | 25.2* |
| Magic Mountain | 14G2 | 6700 | 4/28 | 45 | 21.1 | 9.9 | 16.4* |
| Pole Creek R. S. | 15H14 | 8330 | 4/30 | 63 | 25.1 | 20.0 | 22.9* |
| Red Point (A) | 15H18 | 7940 | 4/29 | 47 | 18.7 | 8.7 | die ino |
| Summit Springs (A) | 13G4 | 8500 | 4/29 | T | T | 0.0 | |
| Vi Pont (A) | 13H3 | 7650 | 4/29 | 27 | 10.7 | 7.0 | |
| Wilson Creek (A) | 15G2 | 7500 | 4/29 | 31 | 12.3 | 7.3 | |
| BIG WOOD RIVER | | | | | | | |
| Dollarhide Summit (A) | 14F8 | 8620 | 4/30 | 50 | 22.2 | 27.5 | 27.8* |
| Galena | 14F1 | 7500 | 4/30 | 35 | 14.6 | 14.2 | 14.0* |
| Galena Summit | 14F12 | 8795 | 4/30 | 65 | 24.7 | 23.6 | 24.5* |
| Graham Ranch | 14F5 | 6200 | 4/29 | 17 | 6.8 | , | |
| Mount Baldy | 14F9 | 9000 | 4/29 | 60 | 20.6 | 17.0 | 21.1* |
| Little Wood River - | Fish Cr | eek | | | | | |
| Garfield R. S. | 13F4 | 6554 | 4/27 | 9 | 3.6 | 5.4 | 1.0* |
| Iron Mine Creek | 13F10 | 6370 | 4/27 | 11 | 4.5 | 5.2 | |
| Muldoon | 13F5 | 6300 | 4/27 | 0 | 0.0 | 0.8 | 0.0* |
| Swede Peak | 13F9 | 7500 | 4/27 | 41 | 14.7 | 14.5 | *** |
| Telfer Ranch | 13F6 | 6000 | 4/27 | 0 | 0.0 | T | |
| BOISE RIVER | | | | | | | |
| Atlanta Summit (A) | 15F4 | 7500 | 4/30 | 76 | 33.8 | 32.4 | 36.0* |
| Bad Bear | 15F2 | 5500 | 5/1 | 18 | 7.8 | 0.0 | - ca |
| Bogus Basin Road | 16F4 | 5360 | 4/30 | 0 | 0.0 | 0.0 | |
| Couch Summit (A) | 14F10 | 6950 | 4/30 | 24 | 9.1 | 10.2 | 14.5* |
| Moores Creek Summit | 15F1 | 6100 | 5/1 | 66 | 29.4 | 16.2 | 29.9 |
| Trinity Mountain (A) | 15F5 | 7400 | 4/30 | 79 | 35.2 | 37.3 | 45.1* |
| OWYHEE RIVER | | | | | | | |
| Bear Creek (A) | 15H1 | 7800 | 4/29 | 44 | 17.5 | 18.6 | 21.2* |
| Silver City | 16F3 | 6400 | 5/3 | 27 | 11.4 | CH 400 | 7.3* |
| South Mountain | 16G1 | 6340 | 4/29 | 22 | 9.4 | 0.4 | 3.5* |
| | | | | | | | |

 ⁽b) 1943-57, 15 year period. # Not located directly on this drainage.
 (A) Aerial observation: Water content estimated. * Estimated 1943-57, 15 year Average.

CURRENT INFORMATION

SNOW

PAST RECORD

| SHUM | | | CONTRACT IN ONLY | | | FAST RECORD | |
|-------------------------|--------|-----------|------------------|------------|----------|--------------|-------------|
| DRAINAGE BASIN and SNOW | COURSE | | DATE OF | SNOW DEPTH | CONTENT | WATER CONTEN | T (Inches) |
| NAME | NO. | ELEVATION | SURVEY | (Inches) | (Inches) | LAST YEAR | AVERAGE b |
| | | | | | | | |
| PAYETTE RIVER | | | | | | | |
| INIBILI ALIAN | | | | | | | |
| Big Creek Summit | 15E2 | 6608 | 4/30 | | 31.4 | | 36 . 24 |
| Bogus Basin | 16F2 | 6120 | 4/30 | 52 | 22.3 | | 23.8 |
| Cozy Cove | 15E8 | 5900 | 4/27 | 24 | 10.0 | 1.9 | 9.24 |
| Crawford R. S. | 15E3 | 4800 | 4/30 | 0 | 0.0 | 0 . 0 | 0.09 |
| Deadwood Airstrip | 15E10 | 5440 | 4/26 | 21 | 10,9 | 0.0 | |
| Deadwood Dam | 15E7 | 5500 | 4/27 | 27 | 17.7 | 1.5 | 13.19 |
| Deadwood Summit (A) | 15E4 | 7000 | 5/7 | 90 | 37.7 | 38.2 | 48,69 |
| Greenfield Flat (A) | 16E7 | 7370 | 5/7 | 97 | 40.6 | 32.1 | |
| Rock Flat Summit | 16E1 | 5200 | 4/27 | 49 | 18.6 | 8.5 | * * |
| Squaw Meadow (A) | 15D2 | 5800 | 5/7 | 67 | 28.1 | | 38.29 |
| | | | | | | | |
| VEISER RIVER | | | | | | | |
| Boulder Creek | 16D1 | 5500 | 4/30 | 42 | 19.0 | 11.3 | GE 40 |
| fica Ridge (A) | 16E6 | 6800 | 5/7 | 72 | 30.2 | 23.1 | 24 |
| Squaw Flat (A) | 16E5 | 6230 | 5/7 | 45 | 18.9 | 13.6 | æ 33 |
| SALMON RIVER | | | | | | | |
| od a Caracla Committee | 15E2 | 6608 | 4/30 | 75 | 31.4 | 27.6 | 36 . 23 |
| Big Creek Summit | | | | | 5.1 | | |
| Borah (A) | 13E8 | 8250 | 5/4 | | | | 0.2 |
| Chapman Creek | 16D2 | 4215 | 4/30 | | 0.5 | | 48.6 |
| Deadwood Summit (A) | 15E4 | 7000 | 5/7 | 90 | 37.7 | | |
| Galena Summit | 14F12 | 8795 | 4/30 | | 24.7 | | 24.5 |
| Gibbons Pass | 13D2 | 7100 | 5/1 | 63 | 26.7 | | 23.0 |
| Johns Creek | 16D3 | 3805 | 4/30 | | 0.0 | | 0.0 |
| fill Creek Summit (A) | 14E1 | 8870 | 5/4 | 68 | 25.8 | | 20 20 |
| Morgan Creek Summit | 14E4 | 7580 | 4/29 | | 14.3 | | 12 NO |
| Redfish Lake | 14E2 | 6600 | 4/28 | | 7.5 | | · · |
| Rock Flat Summit | 16E1 | 5200 | 4/27 | | 18.6 | | et er |
| Twin Peaks (A) | 14E3 | 10300 | 5/4 | 85 | 32.3 | | 20.00 |
| Vienna Mine (A) | 14F4 | 8900 | 4/30 | | | | 36,67 |
| Whitebird Summit | 16D5 | 4390 | 4/30 | 1, | 5 0.3 | 0.0 | ~ ~ |
| Lemhi River | | | | | | | |
| Above Gilmore | 13E19 | 8200 | 4/27 | 42 | 12.5 | 12.0 | = = |
| Aspen-Hall Pass (A) | 13E21 | 8110 | 5/4 | 48 | 14.3 | ter top | × == |
| Copes Camp (A) | 13E17 | 7500 | 5/4 | 38 | 11.3 | | ~ * |
| Hall Creek (A) | 13E20 | 7560 | 5/4 | 18 | 5.4 | | |
| | 13E18 | 9100 | 4/27 | | 23.8 | | ~ ~ |
| Meadow Lake | TOMIC | 7100 | 7/6/ | / | | | |

⁽b) 1943-57, 15 year period. # Not located directly on this drainage. * Estimated 1943-57, 15 year Average. (A) Aerial observation: Water content estimated.

CURRENT INFORMATION

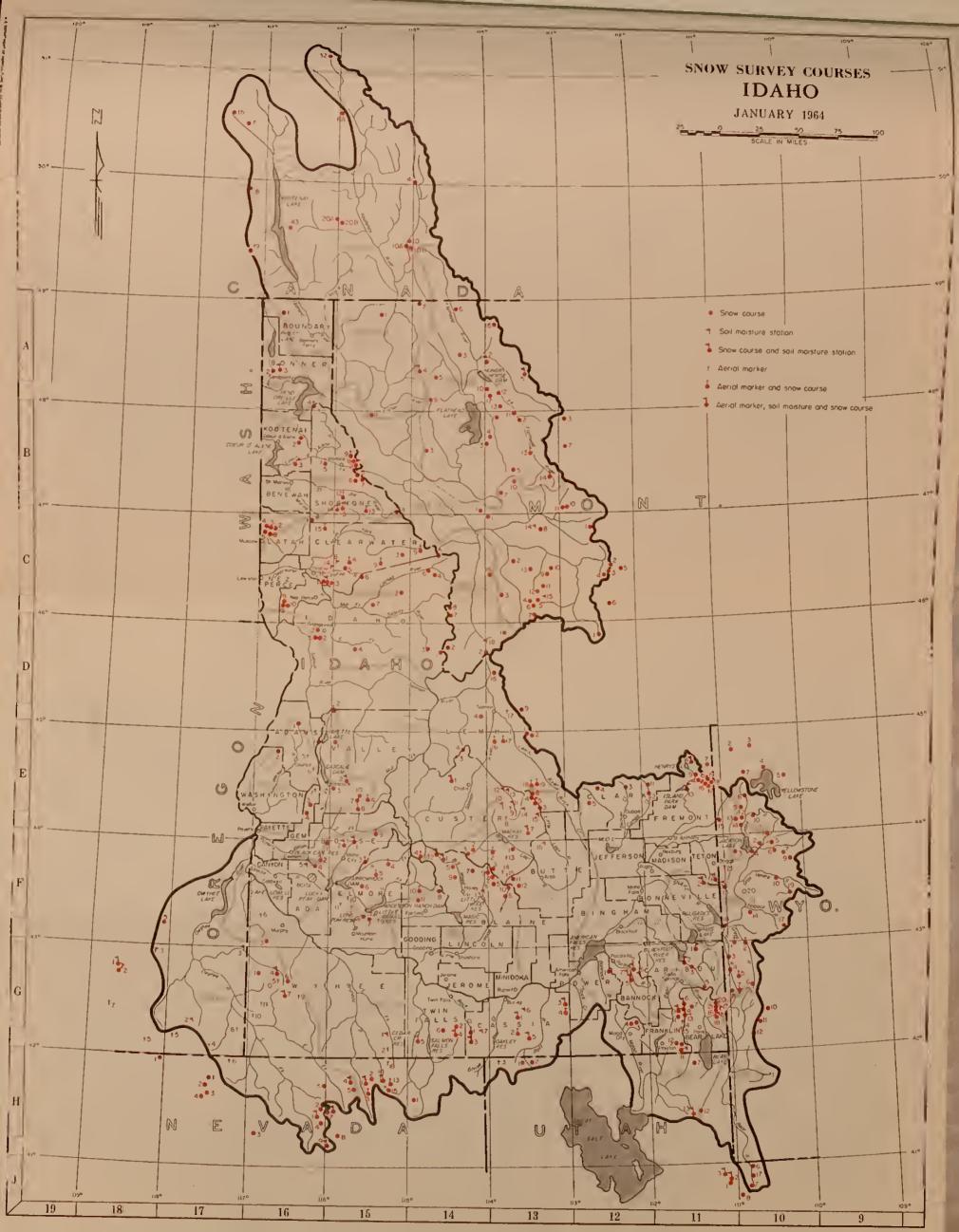
PAST RECORD

SNOW

| SNUW | | THE THE PORTULE | | PAST RECORD | | | |
|-------------------------|--------|-----------------|---------|-------------|------------------|-------------|----------------|
| DRAINAGE BASIN and SNOW | COURSE | | DATE OF | SNOW DEPTH | WATER CONTENT | WATER CONTE | NT (Inches) |
| NAME | NO. | ELEVATION | SURVEY | (Inches) | (Inches) | LAST YEAR | AVERAGE 6 |
| | | | | | | | |
| CLEARWATER RIVER | | | | | | | |
| CLEARWAILA RIVER | | | | | | | |
| Cayuse Airstrip | 15C3 | 3700 | 4/28 | 6 | 2.7 | 0.0 | 1.4* |
| Coolwater Mountain | 15C7 | 6200 | | Delaye | ed . | 25.0 | ec es |
| Crater Meadows | 1509 | 6100 | 4/28 | 125 | 57.8 | 36.7 | සහ සහ |
| Elk Butte | 16C15 | 5550 | 4/28 | 119 | 53.2 | 19.5 | 629 689 |
| Fish Lake Airstrip | 15C2 | 5000 | | Delaye | ed b | 32.5 | 46.1% |
| Forty-nine Meadows | 15B3 | 5000 | 4/28 | 81 | 40.0 | 16.8 | 32.7* |
| Goat Lake | 1409 | 6600 | 4/28 | 130 | 60.1 | ~ - | ~ ~ |
| Granite Peak | 15B13 | 6000 | 4/28 | 122 | 53.3 | 36.4 | |
| Hemlock Butte | 1506 | 5500 | 5/1 | 157 | 71.8 | 38.5 | en en |
| Lolo Pass | 14C5 | 5230 | | Delaye | | 19.6 | 29.7* |
| Lost Lake | 15814 | 6000 | 4/28 | 161 | 74.4 | 44.2 | ano eco |
| Medicine Ridge | 15B4 | 6150 | 4/28 | 118 | 52.7 | an en | 900 GEO |
| Nez Perce Pass | 14D1 | 6575 | 4/27 | 58 | 22.6 | 9.6 | 12.6 |
| Orogrande Mountain | 15D4 | 7800 | ., | Delaye | | 41.9 | ₩₩ |
| Pierce Rgr. Sta. | 15C5 | 3171 | 4/27 | 22 | 9.7 | 0.0 | 1.8* |
| Shanghai Summit | 15C4 | 4600 | 5/1 | 77 | 36.7 | 11.0 | 23.6* |
| | | ,,,,, | | • • | | | |
| PALOUSE RIVER | | | | | | | |
| Crumarine Creek | 1606 | 3500 | 5/2 | 0 | 0.0 | 0.0 | 0.0* |
| East Twin | 16C3 | 4000 | 5/2 | 28 | 14.6 | 0.0 | 0.0* |
| Howard Creek | 16C5 | 3500 | 5/2 | 0 | 0.0 | 0.0 | 0.0* |
| Moscow Mountain | 16C2 | 4800 | 5/2 | | | | |
| West Twin | | | | 47 | 19.3 | 4.9 | 12.7* |
| west IWIII | 16C4 | 4200 | 5/2 | 1.9 | 0.9 | 0.0 | 0.1* |
| | | GRI | EAT BAS | IN | | | |
| | | | | | | | |
| BEAR RIVER | | | | | | | |
| Emigrant Summit | 11G6 | 7350 | 4/29 | 59 | 24.6 | 20.2 | ₩ ₩ |
| Wink Cross | | | | | | | |
| Mink Creek | | | | | | | |
| Christensen Ranch | 11G11 | 5600 | 5/1 | 0 | 0.0 | 0.0 | 0.0* |
| Liberty Spring | 11G13 | 8600 | 4/29 | 97 | 40.0 | 39.0 | COP 608 |
| Strawberry Creek | 11G9 | 5800 | 5/1 | 12 | 5.3 | 0.0 | 1.7* |
| Strawberry Mink Divide | 11G10 | 6800 | 5/4 | 40 | 16.6 | 12.3 | 15.0* |
| Cub River | | | | | | | |
| | | | | | | | 1 |
| Cub River R. S. | 11G12 | 5400 | 5/1 | 0 | 0.0 | 0.0 | 0.0* |
| Willow Flat | 11G4 | 6100 | 5/1 | 14 | 6.2 | T | 3.0* |
| | | | | | | | |

⁽b) 1943-57, 15 year period. # Not located directly on this drainage. * Estimated 1943-57, 15 year Average.

(A) Aerial observation: Water content estimated.



Index to IDAHO SNOW COURSES

| NC, STATE CAME | SEC. TRP, TGE, ELEV. | NO. STATE NAME | SEC, TWP. OGI. ELEV. | NO, STATE NAME | \$EC, TWP, HOE, LEV. | NO, STATE NAME | SEC. TSP. HGI, ILEV, |
|--|--|---|--|---|---|--|---|
| KOOTENAI RIVER 15E11 M Sure Creek Like M Street | 36 268 75W 5500 57 30% 26W 5000 | 1002A WY Elind Bull 1071A WY Pryna Flat | 6 34N 115V 8750 9 38N 115V 6250 | 13E4 1 Savmill Canyon 13E3PA 1 Wet Creek Sammit | 17 12N 26E 6AF 15 8N 25F 8175 | 16F5m Mica Ridge 16E5m ; Squav Flat | 15 15N 2E 6800 32 17N 2E 6290 |
| 10 80 empuson 12 80 Femble 7 80 kemmad | 20,23; 37,431, 6005 7,433; 37,431, 3207 7,431, 31,431, 340.9 | 1053 FT Campt 1067 WT 100 Camp 10054 WT Cottomwood Laws | 9 29N 116W 7500 25 31N 116W 7500 | BIG LOST RIVER 13F3 1 Benr Canyon | 2(3H 1F 2600 0 0h 23E 800 | 16E2 1 Flacer Greek SALMON RIVER 13E2 is 1 A-re-silmore | 15 A 16 17N 3W 6000 |
| U/ RC Cray Drees CDS RC Kinherley 30 BC Markle Caryon | 27,200 00% (%) 2,000 7% 00% 00% 00% 00% 00% 00% 00% 00% 00% 0 | 1001 VI Toulder Greek 10-14 WY Feedman Runch 1000 WY EAST Rim Divide | 26 30% 11.93% 7600 26 30% 116% 6534 32 37% 1110 7950 | 13F12a 1 Cherry Greak Fass 13F2A 1 Copper Fasin 13F11 1 550 Fox | 24 64 21E 600 23 4N 72E 7550 | louis I Signat | 25 11N 23E 35 21 1 N 33E 827 |
| 175 BO Morrissey Ridge 19 BO Welson 114 BO New Fernue | 7687, 17867 71 0 7682 77657 71 0 | 1970 WT Four Mile Mesdows 1982: WT Stade Creek | 35 45% 1127 777 27 48% 116W 72D. 33 37% 118W 5800 | 13F10 Lembelt 14F3A Lort Wood Divids 14F35a North rk Mendov | 3. 44 23E 66 19 67 17 8740 2 78 18F 816 | 1/0 1 hapman rook 1/E17A 1' upon was 1/E17A 1 wr's rook | 16 0 /N 2E 4215 3 188 22E 75 0 22 278 23E 8% |
| 1981 Y Bed Movimitain 19 BC Sannica | 130×2, 274 Tivol', 3x ; | 10715 WY Dreys Boundary 10719 WY Dris Febtre Summis 1003 Dr. Gryser Park Divide | 3A 478 1117 8750 - | 13F1An 1 Slicemeck 14F2A 1 Stickney Rill | 10 4M 2F 0 | 1914 H i d Stow to 3 f Johns reeb 1912 P Le i Fano | 11 % 16W 81 (9 20H 2E 3805 9 1 15W 7E |
| SA BO Sinclair Pass Itali I Baith Greek COA BO Silliwan Mine | \$80.1 | 10EL by Fuckleberry Divide 10EL by Lake Camp 20E0 NO Lowis Lake Divide | 32 49N 1197 730U | TWI I Walte Epib | 2. 48 22E 1 25 19 23E | 13ki h Lever Die slot 13ki n Heit gang ter | 32 12 W 22 W (500 7 W 23 E 5 600 |
| i 80 Opper Elk River | 50°00' 20'8 22' 545. | 121. MY Moran 123 MY Moran Say | 8 437 45% 114% 66. 14 45% 124% 685 44042' 21 942' 75°3 | BIG WOOD RIVER 1458A 1 Johns de Lumit 1459B I Johns | 10 B 40 -6. 1 60 150 4 | 1 HPA : Mealer lake 1. MA 1 M: 1 Cre k summir 1 le 1 M Cre k | 1 78 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 |
| PRIEST RIVER | 27 58% de 1844 | 1055 W7 Worris Basin 1056 OT Folson Meadows 1058 W7 Sair River famili | Co. 3.4 11 H 57 | LaFT I Hase ? More | 3) R 15E -5 1: 5H 17E -5 48 - E | 1484 1 Norgan Greek 158 5 Fe Imare. | 32 184 19E 7580 - 9 9 8 |
| lok3/ I Berton Spring PEND OREILLE - CLARK | 30 585 W LVI | 1 PELC DY Shake Raver Station 1 DT WY Show Fing Melatain #3 2085 WY Spiran Pass | 9 2/N 1160 6m8. 4 3 3170 0600 12 528 31 4 7100 | 145 i Munt widy 14511 i Soldier Barger Stat a | 28 17F A | 1977 S werts take 1982 H Trail One a 1.80e , Twin have | 10 13 74 2 |
| 13013 M. Black Pino 1205 M. Thesman Reservable | 23 87 LTV 17 2 88 57 62 7 | 1987 WE Trumb Divide 1979 WY Suguntee Pass 1975 WE Junton Meadows | 11 936 7300 24 28 1120 693 | LITTLE WOOD RIVER 137-41 : Antield fanger Stat 1: | 35 217 1554 | 14) 4 ' Vienna Mi 1 E m i '-ss' /2 lst 1 ' / Fabird Sumi' | 1 15 mg 655 1 18 mg 4 |
| 1251 M. Opper Treek 1251 M. Coster Mine 1361 M. Dayste Elli | 1 15% & 5° 2 15° & 1% 125. 12 1 1% 120 | 1201 W Tellowjacket HENRYS FORK RIVER | F3 428 1154 7674 | 13010 I 'r = Mine Creck 13.5 I M d 14.1% I M spechead | 35 23E 1 35 88 4E 1 2 28 7 E 145 | CLEARWATER RIVER | C VIV Y |
| 1309 M SD Jorado Mine 13011 M Zhad Burn Fasa 13011s M Jeongatown Lake | 23 | 1127 / Br Springs | 11 13N 35F 64 | lucian I For upine 139 A 1 Stede Foat 1396 I Valfar Rang | 49 . F . S . S . S . S . S . S . S . S . S | 167., 1 A se rear 16 14m | 11 48 28 (24) 11 48 317 |
| 1901 W Sold Treex Daxe 1901 M Soldon Greex 1901 M Ditengaind | 114 8.4 1.27 77.00 7 | 11Ely . Black Moode 17Ens VI Grandy Lake 11El : Island Fark | 33 14% 45E 125 4 11% % 2 13% 43E 6316 | BOISE RIVER | 58 1 E | 14.) The surface of t | 4 N 11E Y 3 N AE 62 2 37N 9E 610C |
| 1308 M Librocht Farest 1301us M Librotht Firest | 17 137 114 114 114 115 115 115 115 115 115 115 | 11Et 1 Later Typings 11Et 1 Lacky Drg 14E5 1 Old Bond | 9 13N 5E 7654 13 45E 750 14 13N 44E 745 | 15124 I Dai Dear 151 : semmet Mountai | 77 68 23 48 66. | 16015A I ELE Butte 1 | 6 40N 3E 5550 7 358 11E 5000 7 368 4E 3450 |
| 1251 W Propositione Paint 12012 W Red Lion | 3 178 177 6331 27 18 18 170 6331 27 178 170 7000 | liE27 1 Poscher's Cabin llE2 1 Valley siev | 7 154 45E 659 | 1- 4 Began Lead Reed 16.5m : Fagus Basin Reed 1°F-m : Commo Crooks Divid | 9 24 19 196 1 3 48 5 5 | 1/ / rest 15 3 / I n'y-dine Meadous | 1 32% 77 455 6 43% 5E 5,6 • |
| 1302 M SI.še Book Moliniali 1305 M Southern Order 1201 M Skemple Pakk | 35 0 % 264 1001 9 58 134 6500 26 038 75 640 | TETON RIVER |)∴ 13S 5E 67 € | 14: A . C uch Samit 15: Derskin 16: Lealman alc. | 7 N 14E 750 F IN E 74 24 78 3E | 16 13 1 Good Lake 16 13 1 meen mail 1606 1 m Bulla | 4 38% 13E 6600 13 35N 2E 300° 1 36% 6E 5500 |
| 130° M. Stort Lake 130° M. Stort Mill 1202 M. Temule Oreek, Lower | 19 US 174 ms 19 58 334 6500 13 88 64 6251 | 18721s W Sarty Carron 11874 . Pice Greek Paes 11818 1 State Line | 44 331 448 6.5 42 34 468 64 | 15 , fixte 111 1579A , Jack on Poes | 1) 73 E 7 85 9E 7 | 14.) , F.t sres Polygre 1404 H Pelis 158144 Lost Lane | 278 10E 470 1. 1 M 1 ₄ W (230 16 43N 4E 6000 |
| 1203 M. Temale Treek, Middle 1201 M. Temaile Insek, Opper | 13 ± 64 6800 19 8% 57 8000 | 23.13M V7 Teton Past CAMAS - BEAVER CREE | 44 434 NAV 853 | 15 Ltm 1 Little Genes / at 1573s 1 Lung Tom 15 LK 1 K res Green Samit | 17 13 E 455 19 /N 7E +100 | 1/ 4 Milann 16012M ' Milann 1441 M Happeron Bass | 15 33N 97 47 14 35N 18 4200 25 18 247 6515 |
| LEI M TO Momentain BITTERROOT RIVER | 33 15% 19V 6800 | 1121 1 Blue Ledge Mine 1223 1 Past Creek | 10 13% 38% 60%. 21 13% 36% 6490 | 15 t 1 Preirie 157,A ' Sted Greak 15 5A 1 'Trinity Me stelln | 13 24 7E 5801 5 58 FE 4800 7 3N 1/E 7/400 | 15: 1 Orogranda Muntain 1505 1 Pierce Ranger Station | 2, 278 68 7830 2 368 5F 3171 |
| 1901: M. Anthrope 1901: M. East Form Camper Station 1907: M. Olokoma Pass | 22 % 1EV 6475 16 2E 1T4 5400 | MEDICINE LODGE CRE | 5 12W 34E 6200 EK | 15)1 a 1 Willow Great Cable OWYHEE RIVER | 7 3H 12 7400 6 H 6E 471 | 1404 Provell Ranger Stati n 1404 Usvegs Pass 19044 Shangtai zmit | 19 304 142 4230 18 308 15E 6600 1 308 1E 4600 |
| 13018m M Mibooms Face 1.57 M Moor Romae | 4 25 197 7000 4 22 197 7100 5 44 237 5340 | 127. 1 Irving Oreck 1225 : Webbar Oreck | 2 134 33E , 35 23 128 32E +7 K | 1 / Antelope Sidge 1 f arren relley | 70 85 18 5W | 1601/1 Sweeney PALOUSE RIVER | 1 328 36 4435 |
| 130 M Serperce Lemp 130 M Seelcaho Summa 1308 M Firth Lexes | 19 13 239 558° 30 68 179 7259 32 58 239 6510 | BLACKFOOT RIVER 1103 I Austin Conthern Ranch 11024 I Obtra of | 28 13 43E 67,92 17 78 42E 6300 | liuds Raitle Criek 15-Di N Ig Bend 10-Di Juntain Pasa Basqui | | 1607 Unmarine Creek 1603 East Tvin | 24 46N 5W 3500 13 4 N 5W 4.90 14 4 N 5W 359 |
| FLATHEAD RIVER | | 1106 i Sing Greek Idvide VIDEM i Smeden Ranch | 15 1.6 L.E 7225 25 13 43E 1.00 | 16/10a I III sin 1 1 N Side tor Peak 17-2MA ish Treak | 9 128 FW FF 6500 8 47N 34E 6500 4 333 33F 7F/0 | 1605 I Tread Creek 1602 I Muscow Hountain 1604 I Vest Tvin | 16 4 W 5W 353 18 43W 4W 4800 14 43W 5W 643 |
| 1431 M Desson Feth 1363 M Sig Greek | 11 198 120 5900 11 245 25 5150 7 228 229 6750 | PORTNEUF RIVER 1205M I Deapsoy Greek | 27 108 38E 64E) | 15.7 N Folky Farm Summit 15.7 N Fy Ganyon 14.5 N Gold Cross | 8 376 381 4450 31 438 548 7.00 31 478 568 6600 | BEAR RIVER 10011 Wy Big Purk | 7 27M 117W 87N |
| 13424 M. Semp Miserry 13424 M. Desert Mountain 1364 M. Ferby Sreek | 30 22% 18V 6400 24 31% 19V 5600 4 228 18W 5500 | 1999s I Lover Dempsey 1292 1 Lover Febble 1201 1 Mink Greek | 1 1.5 38E 4216 7 8\$ 38E 5200 33 7S 34E 6300 | 174 N Franke Posk 15.5s I Tyde Fasturs 164 N Jocks Posk | -2 44% 39% 7600 381 3 83 74 100 38 420 53% 8420 | 11012 1 Christensen Ranch 11012 1 Sub River Ranger Station 11013MP 0 Dry Bread Ford | 27 133 41E 5600 5 153 41F 5430 19 PN 4E 8230 |
| 1227 Y Goet Mountain 1443 M Cofffin Greek Divide 1443 M Hell Roaring Divide | 27 228 107 2007 11 287 257 5150 35 328 227 5701 | 12 27 1 Petble Greek RAFT RIVER | 34 75 37E 4330 | 17:3m O J rden Valley 1:3 N Lourel Drew | 2 335 4511 43 40 23 438 53F 6100 | 11004 Daigrant Summit 1107 Daigration Canyon mouth) | 21 1.3 42F 350 24 123 42E 6500 |
| 198134 M. Bol brook Judé M. Klabetem | 18 214 178 4530 14 378 224 3886 | 13-24 I Sny Secut Camp 13-24 C Clear Greek Mendows | 12 145 23E 70FC 2 14T 14W 7453 | 1 Des C Loriout Public 1754n Louise Conyre 1752 H Lower Eucasain | 2 4.8 47E 920 97 430 44E 6440 25 45B 37E 6700 | 1197F U warden City Sampt 1906 U warden Ranch | 35 14N 4E 7700 17 3N 176 00 |
| 13A5M M Meries Fass 13A10 M Mineral Greak | 34 358 TA 4300 34 358 TA 4300 25 358 TA 4300 | 13% 1 Conner Pas: 13% 1 Howell Canyon 13 4 One File Summit: | 35 128 24E 2000 1+ 148 149 7330 | 1' M M Lower Jack Creek 1'H J D Marrin Greek 1/ J N Midne | 18 42H 53R 6800 28 44H 40 4700 18 3 H 46E 7200 | 10.77 U Haydan r rk 13/12 Wy Felly Ranger Station 11/021 U Henta Cristo R, S, | 1 13 05 4000 13 268 1188 820 3 28 48 820 |
| 13413 M. Quietonion 1382 M. Spotted Bear Mountefu 13414 M. Stravberry Lake | 12 268 179 3800 23 258 159 7000 11 278 159 6500 | 1375K 1 Sheep tollow 1303K 1 Sublett 1344A 1 Summit Springs | 4 14S 24E 6000 8 12S 3 h 6000 15 13S 9 E 8506 | 16.78 5 Rol Flat 11.5a Grayon Cany 1786a 4 Qiinn Riige | 34 /S 54 52 0 7 4/S 40F 7995 7 478 41K 6300 | 1 40 V Finey Labarge a 10317P H Stillwater Camp 11319 I Strewberry Mink Divide | 19 7 IN 1148 882 32 2N 10E 8550 14 13S 41F 6800 |
| 1361 F Tribute Lake 13616 F Trib Lake 13674 F Tall Trees | 4 258 309 0508 . 21 288 109 35.00 14 268 108 3580 | GOOSE - TRAPPER CRE | EK | 1601 e : Red Canyin 1502M N Roden (lat 160) l Silver Sity | 32 1,8 49 645 6 438 535 6830 | 1100 1 Stravbarry Creek 1164F 1 Willow Flat | 9 178 117 5800 2 178 414 6100 |
| .385 M "Sper 1 11 and .283 M erong Midge | 28 208 109 7000 17 258 137 6830 | 14524 Laiger Wich 14524 Bostetter Hanger Station 14572 Trapper Ormes | 26 145 19E 6660 35 145 17E 7500 2 15S 20E 5300 | 16/17A Silvies 16/1 I South Muntain | 35 378 338 6970 8 75 59 6340 | MALAD RIVER 1/14 1 Dry Creek Hat | 31 13S 37E 6350 |
| SPOKANE RIVER | ್ತ ಭಾಷ್ಟ್ರಾಪ್ತ ಭಾಷ್ಟ್ರ | 13'30 U VI P H SALMON FALLS CR, - | | Note 1 ouce r Greek 151 H H Taylor Canyon 1516 H Tremovan Hanch | 75 38 58 6100 35 278 537 600 5 348 558 5700 | 1263 1 Oxford Mountali, MONTPELIER CREEK | 32 135 378 6607 |
| 167 1 More Royald 1185 : Beyow Mayard 168 1 Sopper Ridge | 35 47W 68 4351 34 47W 68 3770 | 15/DML W .mar Greev 14/94 I Gedar Greek 14-0M I tomd31rm | 31 46N 52E 78W 25 15S 13E 7000 25 14S 12E 69W | 1654AR 1 Irlangia 1865a 6 Irou: Grank 1781 N Upper buckakin | 10 418 39K 2800 11 45K 39E 2200 | 11016 1 1 0 et 11017m 1 denan Papa 11 1 m 1 Jenan Ranch | 15 118 45F 6840 . 128 45E 7025 15 128 45E 0580 |
| 15524 1 Fourte of July Summit | 6 6 7 5 8 7 4830 4 4 4 8 3195 3 424 62 6000 | 15 2 r x Creve 15. 3A N cont Crees 15 14A N conteghted Springs | 33 468 588 6800 31 468 676 8800 | 16.2 H Opper Junk Grook 1877a G hVM Lake | 91 428 531 9210 31 3518 37 3/47 1100 | 11620 I Bittle Beauer 11918 I Montpeller Creek 11921 I Whistey Fist | 26 113 45F / 770 27 128 45K / 570 |
| SEM I WARRY SETA'S CITER | 19 | 14H N Jacos Gress 1452 1 Megir Mountain | 6 45N 60E 8945 6 42N 62K 7000 14 12 S 12K 6760 | PAYETTE RIVER 1500H 1 sig Greek Summit 1600H 1 Bogus Busin | 24 15N 5E 670R 16 5N 3E 6120 | Adves a million 1 194 | 26 11 5 45F 6.835 |
| 15844 I Modelee Ridge 16444 I Mosquisto Ridge 15844 I Guille Oreez | 24 43% 108 6190 5 54% No 5443 -9 44% 57 975 | 1991m 1 Fatrick Hanch 19910M M Pole Greek Ranger Station 1992a M Red Point | 23 159 12E 5720 13 46N 59E 8330 15 47N 61E 7940 | 1508 1 Cory Gove 1503 1 Growford Hanger Station | 19 11N /E 4 600 21 14N 4B 4800 | 1.00.00 | |
| 15814 1 Noland Sumit 1660 : Stempt 15874 1 Sunset | 25 478 68 5250 28 4 3 425 12 25 4 22 498 52 500 | 15 34 B Seventy Sim Greek 1404 1 Shombone Beals 1904 5 Vilson Greek | 6 648 53E 7100 24 145 17E 5740 24 165 17E 7500 | 1521) Dendwood Airetrlp 1527 Dendwood Siver Una 1522 Dendwood Summit | 8 118 7E 5270 23 148 7E 7000 | LEGEND Numbering System (| |
| SNAKE FIVER - WYOMII | | LITTLE LOST RIVER | | 1617a 1 Grounfield Flat 1612 I High Valley Summit 1921 1 Jako Fork | 1 138 2E 9370 9 108 2E 5170 3 168 4E 6000 | TOJ? SHOR COURST DNAY. TOJPE SHOR COURST AND RECEPTATION TOJPM SHOR COURST AND ROLL MOISTURE | |
| 3. 30 1183 676 137M 1 Felryley Guard Station 77 12M 2/E 6755 1307A 1 Squay Pendley 12P 47 Arter Pres 1 | | | | 1 18B 2E 5200 5 21B 4E 5800 17 11B 3E 5200 | 1031A SHOP COURSE, SOIL MOISTURE STATION AND ASSIGN WASHER. 1037MA SHOP COURSE, SOIL MOISTURE STATION AND ASSIGN WASHER. | | |
| 1072 V Brain Georg | 2. U.M 374 GFD 4 LLB 14 2975 | 13RA 1 Moonahlos 13RA 3 Meleon's Bray | 3 11H 26E 0000 21 13H 26E 7450 26 11H 25E 6400 | WEISER RIVER 161) Soulder Greek | 15 20H 1W 5500 | TOJEM SOIL MOISTURE STATION ONLY, | |
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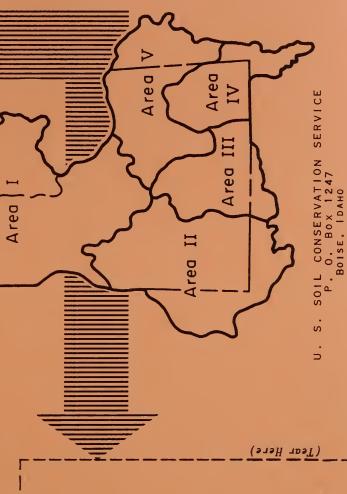
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